



## Tab W Missouri High School Graduates Performance Report

Coordinating Board for Higher Education  
March 8, 2018

### BACKGROUND

The Coordinating Board for Higher Education's Missouri High School Graduates Performance Report tracks Missouri's public high school graduates entering the state's public two- and four-year degree-granting postsecondary institutions as first-time, full-time, undergraduate, degree-seeking students in the fall semester following their high school graduation. The annual report, which was first issued in 1996, provides information to secondary and postsecondary stakeholders regarding student preparation, persistence, and completion. The law that authorizes the CBHE to prepare the annual report, § 173.750, RSMo, describes the report's contents, which must include "grade point averages after the initial college year...; the percentage of students returning to college after the first and second half of the initial college year, or after each trimester of the initial college year; the percentage of students taking noncollege level classes in basic academic courses during the first college year, or remedial courses in basic academic subjects of English, mathematics, or reading; and other such data as determined by rule and regulation of the coordinating board for higher education."

### HIGHLIGHTS OF THIS YEAR'S REPORT

#### Enrollment and Preparation

This year's report provides data about postsecondary enrollment and preparation of the public high school graduating class of 2017.

Total enrollment of same-year Missouri public high school graduates in Missouri public institutions increased by 1.5 percent from 21,833 first-time, full-time, degree-seeking undergraduates in 2016 to 22,160 in 2017. 10,423 students (47 percent) attended two-year institutions, and 11,737 students (53 percent) attended four-year institutions. Enrollment of first-time, full-time, degree-seeking students increased by 6.7 percent at public two-year institutions from the previous year and decreased at public four-year institutions by 2.7 percent. Detailed summary tables are included in the attachment to this item.

This report provides the state's benchmark measurement of enrollment in remedial coursework, which continues to decline. The MDHE continues to work with the institutions to encourage the wider implementation of co-requisite coursework, which places more entering students in credit-bearing courses and shortens their paths to a credential. These and other policy changes and major statewide initiatives continue to impact the benchmark remediation rate.

Remedial Participation of Recent Missouri Public High School Graduates in Public Postsecondary Institutions					
	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017
<b>Total</b>	35.6%	30.8%	28.2%	26.8%	22.8%
<b>Math</b>	30.1%	26.2%	23.8%	21.5%	17.6%
<b>English</b>	15.5%	12.3%	10.0%	11.4%	10.1%
<b>Reading</b>	9.7%	7.6%	6.1%	6.6%	6.0%

#### *Other Trends in Enrollment and Preparation*

- Overall enrollment in remedial coursework declined for the fourth consecutive year, and enrollment in remedial math declined for the fifth year in a row. Enrollments in remedial English/writing and reading declined from fall 2016.

- Overall enrollment in remediation at open admissions institutions has declined from 54.2 percent in fall 2013 to 33.5 percent in fall 2017. Enrollment in remedial math at moderately selective institutions has declined from 25.2 percent in fall 2013 to 12.1 percent in fall 2017.
- Overall remedial enrollment and enrollment in all content areas (math, English, and reading) decreased among African-American students compared to fall 2016. Enrollment levels are now very similar to the fall 2015 entering cohort after a marked one-year increase.
- Overall enrollment in remediation has decreased dramatically among Hispanic students since 2013 (43.8 percent to 27.2 percent) even as their numbers have increased dramatically (470 to 1,019).

### **Performance and Retention in College**

The High School Graduates Performance Report also tracks several measures of student success and persistence in Missouri's public postsecondary sector. This year's report provides data about performance and retention in college for the public high school graduating class of 2016. Detailed summary tables are included in the attachment to this item. Among the more significant findings for this cohort are:

- Fall-to-fall retention decreased slightly over 2017 from 77.7 percent to 76.9 percent. Retention for all racial/ethnic groups decreased except Asian/Pacific Islanders, and are roughly comparable to the class of 2014. Female retention was 78.8 percent, a .2 percent decrease from fall 2016, compared to male retention at 74.7 percent, a 1.4 percent decrease from fall 2016.
- On average, this cohort completed 32.8 credits by the end of the spring 2017 term with a 2.86 grade point average. Asian/Pacific Islanders completed 35.8 credits with a 3.05 GPA, African-Americans completed 20.8 credits with a 2.31 GPA, and Caucasians completed 34.6 credits with a 2.94 GPA. Females completed 33.7 credits with a 2.95 GPA, compared to males, who completed 31.7 credits with a 2.75 GPA.
- Average first-term GPAs remained largely unchanged for all ethnic groups except African-Americans compared to the fall 2015 entering cohort. Average first-term GPA has decreased from 2.61 in fall 2015 to 2.28 in fall 2016 for African-Americans, although spring GPAs for returning students were comparable to the class of 2015.
- Overall, 86.9 percent of fall 2016 entering students completed their first spring semester and 76.9 percent returned for the fall. For African-American students, however, 83.4 percent completed the first spring semester, but only 65.1 percent returned for the fall.

### **Degree Completion**

The timely completion of a certificate or degree is an additional indication of how well prepared Missouri's high school graduates are for college-level work. Detailed tables in the attachment to this item show the six-year graduation rate of students beginning college in the fall of 2011. The findings include:

- Slightly less than half (48.9 percent) of incoming public Missouri high school students who entered as a first-time, full-time degree-seeking student in fall 2011 had earned a two- or four-year degree from a public Missouri college or university by spring 2017. This is a small increase over the 2010 cohort (48.2 percent). This rate does not account for transfer or completion from an independent or out-of-state institution.
- 35.8 percent had earned a bachelor's degree, 16.8 percent earned an associate's degree, and 2.2 percent earned a graduate or professional degree within six years. The percentage earning an associate's degree was an increase over the 2010 entering cohort (15.8 percent). Some students earned more than one degree, and are counted here more than once.

- As part of a continuing trend, females were more likely than males (51.5 percent compared to 45.8 percent) to have earned a degree within six years, as were students enrolled at highly selective (79.5 percent) and selective (67.0 percent) institutions.

#### **RECOMMENDED ACTION**

This is an information item only.

#### **ATTACHMENT**

- Enrollment and Preparation, Performance and Retention in College, and Degree Completion Tables

**Tab W Attachment**

**Enrollment and Preparation, Performance and Retention in College, and Degree Completion Tables**

**Enrollment and Preparation**

**Table 1: Recent Public Missouri High School Graduate Enrollment by Sector, Gender, and Race/Ethnicity, 2007 to 2017**

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	10-Year	1-Year
												%	%
<b>Overall Enrollment</b>	20,839	21,598	22,228	23,948	23,742	21,018	22,034	22,443	21,453	21,833	22,160	6.3%	1.5%
<b>Two-Year</b>	9,188	9,227	10,504	11,225	11,279	9,132	10,393	10,610	9,303	9,769	10,423	13.4%	6.7%
	44.1%	42.7%	47.3%	46.9%	47.5%	43.4%	47.2%	47.3%	43.4%	44.7%	47.0%		
<b>Four Year</b>	11,651	12,371	11,724	12,723	12,463	11,861	11,641	11,833	12,150	12,064	11,737	0.7%	-2.7%
	55.9%	57.3%	52.7%	53.1%	52.5%	56.4%	52.8%	52.7%	56.6%	55.3%	53.0%		
<b>Women</b>	11,421	11,755	12,013	13,067	12,997	11,596	12,175	12,342	11,816	11,983	12,275	7.5%	2.4%
	54.8%	54.4%	54.0%	54.6%	54.7%	55.2%	55.3%	55.0%	55.1%	54.9%	55.4%		
<b>Men</b>	9,411	9,838	10,211	10,863	10,733	9,397	9,844	10,092	9,628	9,840	9,872	4.9%	0.3%
	45.2%	45.6%	45.9%	45.4%	45.2%	44.7%	44.7%	45.0%	44.9%	45.1%	44.5%		
<b>African American</b>	1,895	2,055	0	2,433	2,553	1,525	2,209	2,065	2,010	2,138	1,870	-1.3%	-12.5%
	9.1%	9.5%	10.2%	10.2%	10.8%	7.3%	10.0%	9.2%	9.4%	9.8%	8.4%		
<b>Caucasian</b>	16,567	17,723	17,758	18,381	18,011	14,289	17,215	17,071	16,792	17,007	16,097	-2.8%	-5.4%
	79.5%	82.1%	79.9%	76.8%	75.9%	68.0%	78.1%	76.1%	78.3%	77.9%	72.6%		
<b>Hispanic</b>	359	481	486	374	343	275	470	620	846	885	1019	183.8%	15.1%
	1.7%	2.2%	2.2%	1.6%	1.4%	1.3%	2.1%	2.8%	3.9%	4.1%	4.6%		
<b>Asian / Pacific Islander</b>	345	372	347	408	395	333	486	537	497	489	449	30.1%	-8.2%
	1.7%	1.7%	1.6%	1.7%	1.7%	1.6%	2.2%	2.4%	2.3%	2.2%	2.0%		
<b>Other</b>	1,673	967	1,368	2,352	2,440	4,596	1,654	2,150	1,308	1,314	2,725	62.9%	107.4%
	8.0%	4.5%	6.2%	9.8%	10.3%	21.9%	7.5%	9.6%	6.1%	6.0%	12.3%		

**Data Source: Enhanced Missouri Student Achievement Study (EMSAS)**

**Table 2: Recent Missouri Public High School Graduate Enrollment in Remediation by Institutional Admissions Selectivity; 2013 to 2017**

	2013	2014	2015	2016	2017
<b>Selective</b>	<b>10.9%</b>	<b>10.5%</b>	<b>9.6%</b>	<b>9.4%</b>	<b>8.8%</b>
Math	10.1%	9.5%	8.7%	8.8%	8.3%
English	1.4%	1.6%	1.4%	1.1%	1.1%
Reading	-	-	-	-	-
<b>Mod Selective</b>	<b>31.7%</b>	<b>21.4%</b>	<b>22.5%</b>	<b>19.7%</b>	<b>19.4%</b>
Math	25.2%	13.0%	15.5%	11.7%	12.1%
English	12.5%	11.1%	10.3%	10.2%	10.3%
Reading	3.8%	3.4%	0.5%	0.5%	0.2%
<b>Open</b>	<b>54.2%</b>	<b>47.8%</b>	<b>45.2%</b>	<b>42.2%</b>	<b>33.5%</b>
Math	45.7%	41.7%	38.9%	34.5%	25.8%
English	25.8%	20.0%	16.7%	19.2%	15.8%
Reading	18.0%	13.8%	12.8%	13.4%	11.6%

**Table 3: Recent Missouri Public High School Graduate Enrollment in Remediation by Gender; 2013 to 2017**

	2013	2014	2015	2016	2017
<b>Women</b>	<b>38.6%</b>	<b>32.4%</b>	<b>29.9%</b>	<b>28.3%</b>	<b>24.5%</b>
Math	33.7%	28.2%	25.9%	23.5%	19.5%
English	15.4%	12.2%	9.9%	11.6%	10.3%
Reading	10.8%	8.4%	6.4%	7.0%	6.4%
<b>Men</b>	<b>31.9%</b>	<b>28.7%</b>	<b>26.1%</b>	<b>24.9%</b>	<b>20.7%</b>
Math	25.7%	23.6%	21.2%	19.0%	15.1%
English	15.6%	12.4%	10.2%	11.2%	9.8%
Reading	8.4%	6.6%	5.8%	6.1%	5.4%

**Source: Enhanced Missouri Achievement Study (EMSAS)**

**Table 4: Recent Missouri Public High School Graduate Enrollment in Remediation by Race;  
2013 to 2017**

	2013	2014	2015	2016	2017
<b>African-American</b>	<b>65.5%</b>	<b>52.5%</b>	<b>47.0%</b>	<b>52.6%</b>	<b>46.0%</b>
Math	57.8%	44.0%	40.4%	43.1%	35.4%
English	37.6%	32.1%	23.8%	32.6%	28.1%
Reading	27.1%	23.9%	18.3%	23.6%	19.3%
<b>Caucasian</b>	<b>31.7%</b>	<b>27.0%</b>	<b>25.8%</b>	<b>23.3%</b>	<b>18.8%</b>
Math	26.8%	23.0%	21.7%	18.7%	14.8%
English	12.3%	10.0%	8.3%	8.5%	6.7%
Reading	7.4%	5.6%	4.8%	4.6%	3.2%
<b>Hispanic</b>	<b>43.8%</b>	<b>42.4%</b>	<b>32.4%</b>	<b>28.5%</b>	<b>27.2%</b>
Math	35.1%	31.6%	26.1%	22.4%	20.6%
English	19.4%	19.7%	13.2%	11.8%	13.1%
Reading	12.3%	13.4%	5.7%	6.0%	8.9%
<b>Asian / Pacific Islander</b>	<b>26.1%</b>	<b>25.0%</b>	<b>20.3%</b>	<b>20.7%</b>	<b>14.3%</b>
Math	19.3%	18.3%	16.5%	14.3%	10.5%
English	12.8%	12.5%	7.4%	11.5%	6.0%
Reading	8.6%	8.4%	5.6%	6.5%	4.0%
<b>Other / Unknown</b>	<b>37.7%</b>	<b>38.0%</b>	<b>30.5%</b>	<b>31.0%</b>	<b>30.1%</b>
Math	29.3%	34.6%	26.2%	25.0%	21.2%
English	18.0%	9.1%	9.7%	13.9%	16.9%
Reading	9.6%	5.4%	5.4%	6.7%	11.8%

**Source: Enhanced Missouri Achievement Study (EMSAS)**

## Performance and Retention in College

Table 5: Recent Missouri Public High School Graduate Retention by Gender and Race/Ethnicity; Fall 2016 - Fall 2017

	Students	Completed Fall 2016	Avg. Fall 2016 GPA	Avg. Credits Completed (Fall 2016)	Completed Spring 2017	Avg. Spring 2017 GPA	Avg. Credits Completed (Spring 2017)	Enrolled Fall 2017
<b>Female</b>	<b>11,985</b>	<b>98.2%</b>	<b>2.91</b>	<b>21.3</b>	<b>87.8%</b>	<b>2.95</b>	<b>33.7</b>	<b>78.8%</b>
African American	1,266	98.0%	2.40	11.9	84.9%	2.38	21.6	67.4%
Caucasian	9,265	98.3%	3.00	22.9	88.6%	3.04	35.6	80.7%
Hispanic	483	97.7%	2.72	19.6	84.8%	2.79	31.0	76.8%
Asian / Pacific Islander	252	99.2%	3.18	23.8	88.4%	3.16	37.6	83.7%
Other/Unknown	719	98.0%	2.75	17.9	85.1%	2.77	29.8	74.5%
<b>Male</b>	<b>9,840</b>	<b>98.0%</b>	<b>2.68</b>	<b>19.6</b>	<b>85.7%</b>	<b>2.75</b>	<b>31.7</b>	<b>74.7%</b>
African American	867	98.2%	2.11	10.2	81.1%	2.19	19.8	62.1%
Caucasian	7,741	97.9%	2.76	20.9	86.3%	2.83	33.3	76.5%
Hispanic	402	98.7%	2.51	17.3	85.8%	2.62	28.8	70.3%
Asian / Pacific Islander	237	98.3%	2.89	21.8	93.6%	2.93	33.9	86.9%
Other/Unknown	593	97.9%	2.49	17.3	81.6%	2.61	28.5	67.7%
<b>Total</b>	<b>21,835</b>	<b>98.1%</b>	<b>2.81</b>	<b>20.5</b>	<b>86.9%</b>	<b>2.86</b>	<b>32.8</b>	<b>76.9%</b>
African American	2,139	97.8%	2.28	11.2	83.4%	2.31	20.8	65.1%
Caucasian	17,008	98.1%	2.89	22.0	87.5%	2.94	34.6	78.8%
Hispanic	885	98.1%	2.62	18.6	85.3%	2.71	30.0	73.8%
Asian / Pacific Islander	487	98.7%	3.04	22.8	91.0%	3.05	35.8	85.2%
Other/Unknown	1,314	98.0%	2.63	17.6	83.5%	2.70	29.2	71.4%

Source: Enhanced Missouri Achievement Study (EMSAS)

Table 6: Recent Missouri Public High School Graduate Retention by Sector and Race/Ethnicity; Fall 2016- Fall 2017

	Students	Completed Fall 2016	Avg. Fall 2016 GPA	Avg. Credits Completed (Fall 2016)	Completed Spring 2017	Avg. Spring 2017 GPA	Avg. Credits Completed (Spring 2017)	Enrolled Fall 2017
<b>Public 2Y</b>	<b>9,770</b>	<b>97.2%</b>	<b>2.55</b>	<b>17.2</b>	<b>80.3%</b>	<b>2.66</b>	<b>27.0</b>	<b>66.2%</b>
African American	981	96.8%	2.06	7.0	76.3%	2.17	14.5	55.2%
Caucasian	7,550	97.2%	2.64	18.9	80.9%	2.74	29.0	67.9%
Hispanic	433	97.6%	2.41	16.1	80.3%	2.53	25.0	64.2%
Asian / Pacific Islander	171	98.2%	2.60	15.7	84.7%	2.61	24.1	74.8%
Other/Unknown	635	97.4%	2.40	14.7	78.1%	2.49	23.3	62.3%
<b>Public 4Y</b>	<b>12,065</b>	<b>98.8%</b>	<b>3.01</b>	<b>23.2</b>	<b>92.2%</b>	<b>3.01</b>	<b>36.9</b>	<b>85.6%</b>
African American	1158	98.6%	2.47	14.6	89.4%	2.41	25.4	73.5%
Caucasian	9,458	98.9%	3.09	24.4	92.8%	3.09	38.5	87.4%
Hispanic	452	98.6%	2.83	20.9	90.0%	2.87	34.3	83.1%
Asian / Pacific Islander	318	99.0%	3.28	26.6	94.3%	3.26	41.4	90.8%
Other/Unknown	679	98.5%	2.85	20.3	88.6%	2.88	34.1	79.9%

Source: Enhanced Missouri Achievement Study (EMSAS)

## Degree Completion

**Degree Completion Table 7: Recent Missouri Public High School Graduate Six-Year Completion Rate by Gender and Race/Ethnicity; Fall 2011 through Spring 2017**

	Students	% Completed Associate's	% Completed at Least Bachelor's	% Completed Graduate/Professional	Total Completions
<b>Female</b>	<b>12,801</b>	<b>17.7%</b>	<b>37.5%</b>	<b>2.5%</b>	<b>51.5%</b>
African American	1,521	5.9%	23.5%	0.7%	29.1%
Caucasian	9,553	20.9%	37.6%	2.3%	53.8%
Hispanic	189	22.2%	29.1%	0.0%	46.5%
Asian / Pacific Islander	176	10.8%	46.5%	2.8%	54.5%
Other/Unknown	1,362	9.1%	52.7%	6.3%	60.5%
<b>Male</b>	<b>10,616</b>	<b>15.6%</b>	<b>33.7%</b>	<b>1.8%</b>	<b>45.8%</b>
African American	909	6.8%	19.1%	0.4%	24.5%
Caucasian	8,275	17.5%	34.3%	1.7%	47.8%
Hispanic	152	17.1%	25.6%	1.9%	36.8%
Asian / Pacific Islander	214	11.2%	44.8%	6.0%	53.2%
Other/Unknown	1,066	9.3%	41.0%	3.2%	48.7%
<b>Total</b>	<b>23,429</b>	<b>16.8%</b>	<b>35.8%</b>	<b>2.2%</b>	<b>48.9%</b>
African American	2,431	6.3%	21.8%	0.6%	27.4%
Caucasian	17,834	19.3%	36.0%	2.0%	51.0%
Hispanic	341	19.9%	27.5%	0.8%	42.2%
Asian / Pacific Islander	391	11.0%	45.5%	4.6%	53.7%
Other/Unknown	2,432	9.2%	47.7%	4.9%	55.3%

**Source: Enhanced Missouri Student Achievement Study (EMSAS)**

**Table 8: Recent Missouri Public High School Graduate Six-Year Completion Rate by Institutional Admissions Selectivity; Fall 2011 through Spring 2017**

	Students	% Completed Associate's	% Completed at Least Bachelor's	% Completed Graduate/Professional	Total Completions
Highly Selective	849	2.9%	77.0%	11.3%	79.5%
Selective	6,750	3.5%	63.6%	4.5%	67.0%
Moderately Selective	3,778	5.2%	51.9%	1.7%	55.4%
Open	12,052	28.8%	12.3%	0.4%	34.7%

**Source: Enhanced Missouri Student Achievement Study (EMSAS)**